

and analog color signals C by a D/A converter 98. The analog luminance signal Y and analog color signals C are then converted by an RGB encoder 99 into an RGB signal, which is then output through a video output terminal 16.

## CLAIMS (with indication of amended or new):

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AMENDED 4. An endoscope apparatus comprising:

a general-purpose video processing circuit having a drive signal generation function for driving a solid-state image pick-up device built into an endoscope and a signal processing function for outputting a standard video signal by processing an output signal from the solid-state image pickup device; and

an endoscopic function adjusting circuit comprising a function modifying circuit, connected to the general-purpose video processing circuit, for modifying at least one of the drive signal processing function and the signal processing function executed by the general-purpose video signal processing circuit in accordance with the endoscope having the solid-state image pickup device therein;

wherein the endoscopic function adjusting circuit comprises a delay amount adjusting circuit for canceling the effect of a signal delay taking place in a signal cable connecting the solid-state image pickup device to the signal processing circuit.

## **AMENDED** 5. An endoscope apparatus comprising:

a general-purpose video processing circuit having a drive signal generation function for driving a solid-state image pick-up device built into an endoscope and a signal processing function for outputting a standard video signal by processing an output signal from the solid-state image pickup device; and

an endoscopic function adjusting circuit comprising a function modifying circuit, connected to the general-purpose video processing circuit, for modifying at least one of the drive signal processing function and the signal processing function executed by the general-purpose

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video signal processing circuit in accordance with the endoscope having the solid-state image pickup device therein;

wherein the endoscope is detachably connected to a light source, and the endoscopic function adjusting circuit comprises at least a white balance adjusting circuit for detecting ID information indicative of the wavelength distribution of light emitted by a lamp built into the light source, and automatically setting a white balance state in view of said ID information.

## **AMENDED** 6. An endoscope apparatus comprising:

a general-purpose video processing circuit having a drive signal generation function for driving a solid-state image pick-up device built into an endoscope and a signal processing function for outputting a standard video signal by processing an output signal from the solid-state image pickup device; and

an endoscopic function adjusting circuit comprising a function modifying circuit, connected to the general-purpose video processing circuit, for modifying at least one of the drive signal processing function and the signal processing function executed by the general-purpose video signal processing circuit in accordance with the endoscope having the solid-state image pickup device therein;

wherein the endoscopic function adjusting circuit comprises an adjusting circuit accommodating a variation in the number of pixels, for producing the standard video signal, even when the number of the pixels in the solid-state image pickup device is changed, by storing dummy pixels in a frame memory to compensate for a reduced number of pixels, and by applying a zoom function to produce said standard video signal from said reduced number of pixels.

**AMENDED** 7. An endoscope apparatus according to Claim 6, wherein the endoscopic function adjusting circuit has the function of outputting a video signal which produces a still image.

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## **AMENDED** 8. An endoscope apparatus comprising:

a general-purpose video processing circuit having a drive signal generation function for driving a solid-state image pick-up device built into an endoscope and a signal processing function for outputting a standard video signal by processing an output signal from the solid-state image pickup device; and

an endoscopic function adjusting circuit comprising a function modifying circuit, connected to the general-purpose video processing circuit, for modifying at least one of the drive signal processing function and the signal processing function executed by the general-purpose video signal processing circuit in accordance with the endoscope having the solid-state image pickup device therein;

wherein the endoscopic function adjusting circuit has the motorized function of flexing a bending portion of the insert section, interlocked with pan and tilt display functions which compensate for said motorized bending operation.

**AMENDED** 9. An endoscope apparatus according to one of Claims 4, 5, 6 and 8, wherein the general-purpose video signal processing circuit and the endoscopic function adjusting circuit are usable with a plurality of insert sections having different respective lengths and correspondingly different internal delay amounts.

AMENDED 10. An endoscope apparatus according to one of Claims 4, 5, 6 and 8, wherein the general-purpose video signal processing circuit and the endoscopic function adjusting circuit are usable with a plurality of solid-state image pickup having different respective numbers of pixels.

**NEW** 11. An endoscope apparatus according to one of claims 4, 5, 6 and 8, further comprising:

a solid-state image pickup device mounted at the end of an insert section of an endoscope;

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a signal processing circuit, arranged in the endoscope, for driving the solid-state image pickup device and for producing a standard video signal in response to an output signal from the solid-state image pickup device;

said general-purpose video signal processing circuit and said endoscopic function adjusting circuit being comprised in said signal processing circuit.

**NEW** 12. An endoscope apparatus according to one of claims 4, 5, 6 and 8, wherein said endoscopic function adjusting circuit controls a wave-shaping operation for wave-shaping said output signal from said solid-state image pickup device.

